

## REMARKS

Claims 12, 18, 23, 26, 29 and 31 have been amended. These changes have been made to place the claims in better form for examination and to further obviate the 35 U.S.C. §112 and 102(b) rejections as set forth in the Office Action dated November 5, 2008. It is believed that these amendments do not constitute new matter. It is submitted these amendments obviate the rejections. Withdrawal of these rejections is respectfully requested.

The Examiner has rejected claims 12, 18-21, 23-26, 29 and 31 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner has rejected claim 12 as being indefinite in regards to "manipulating". Applicant has amended claim 12 as suggested by the Examiner. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claims 18, 23 and 29 under 35 U.S.C. §112, second paragraph, because of a lack of a proper comparative basis. Applicant submits that immature green pepper fruit comprising at least one *CL* allele and at least one *Y* allele are incapable of having the same or even similar sucrose content as mature green pepper fruit comprising two *c/* alleles and two *y* alleles of the present invention. As discussed in the Specification on page 4, lines 20-25, the *CL* and *Y* alleles are unexpectedly associated with sucrose content and ascorbic acid content in pepper fruit. When both *CL* alleles and both *Y* alleles are inactivated resulting in the *y/y;c/c/* genotype of the present invention, the sucrose content and the ascorbic acid content of the pepper fruit are increased as shown on page 10 in Table 1 and page 12 in Table 2. Additionally, wildtype red pepper fruit do not achieve increased sucrose and ascorbic acid contents until they are mature (see page 3, lines 23-24) and wildtype red pepper fruit are red due to having at least one *Y* allele (see page 2, lines 1-7). Given the inability of green immature pepper fruit comprising at least one *CL* allele and at least one *Y* allele to produce increased sucrose content and increased ascorbic acid content, Applicant submits that there is a proper comparative basis for sucrose content and

ascorbic acid content between the *y/y;cl/cl* pepper fruit of the present invention and immature green pepper fruit. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claims 18, 19, 21, 23 24, 26, 29 and 31 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Applicant has amended claims 18, 23, 26, 29 and 31. Support for these amendments can be found on page 10, Table 1 and page 12, Table 2. In Table 1, the sucrose content of 2.1 g/kg for Oblix and Fiesta was multiplied by a factor of 2.85 to equal 5.9 g/kg, the lowest sucrose content of the two pepper varieties having genotype *y/y;cl/cl* of the present invention. In Table 2, the ascorbic acid content of 1.28 g/kg for pepper variety Fiesta was multiplied by a factor of 1.73 to equal 2.2 g/kg, the lowest sucrose content of the two pepper varieties having genotype *y/y;cl/cl* of the present invention. For the remaining numbers listed in the Office Action by the Examiner, Applicant draws the Examiner's attention to the Specification, specifically page 7, line 33 for "5.4 grams"; page 8, line 1 for "7.1 grams"; page 8, line 13 for "2.1 grams"; and page 8, line 14 for "2.5 grams". The same pages of the Specification are referred to for the numbers in claim 31. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claims 12, 18-21, 23-26, 29 and 31 under 35 U.S.C. §112, first paragraph, for lack of enablement. Applicant respectfully submits that the claims are enabled. Applicant has amended claims 12, 18, 23 and 29. As discussed in the Specification, there are methods well-known in the art which can be used to determine if a pepper fruit and/or plant has the *y/y;cl/cl* genotype. Page 5, line 17 through page 6, line 2 discusses the use of RFLP for determining the presence of the *y* allele. Page 6, lines 3-8 also discuss the use of PCR with known primers for the CSS gene which corresponds to the *y* allele. Page 6, lines 14-22, also discusses a very simple method for determining if a pepper fruit has the *cl* allele using microscopy. The techniques described are well-known in the art and are well within the skill of one of ordinary skill in the art. Therefore the claims are enabled. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claims 12-21, 23-26, 29 and 31 under 35 U.S.C.

§102(b) as being anticipated by Smith, PG (*J. Hered.*, Vol. 41, No. 5, pp 138-140) in light of Shifriss et al. (*Euphytica*, Vol. 60, 1992, pp 123-126), Park et al. (*Korean J. Plant Path.*, Vol. 5, No. 3, 1989, pp 262-270) and Osuna-Garcia et al. (*J. Ag. Food Chem.*, Vol. 46, No. 12, Dec. 1998, pp. 5093-5096). Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. v. Garlock*, 721 F.2d 1540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Further, "anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d, 1542 (Fed. Cir. 1983).

Applicant submits that none of the prior art references, either singly or in combination, teach every element of the claimed invention. None of the cited references teach a method to enhance sucrose content or ascorbic acid content in pepper fruit. In fact, the data presented in Osuna-Garcia in Figure 3 and discussed on page 5095, at the bottom of column 1 clearly show that a mature green chile pepper fruit has a significantly lower ascorbic acid content than do any of the red chile peppers. In addition, Park indicates that red pepper fruits have higher total carbohydrate content than green pepper fruits (although there is no indication in this abstract as to whether the green pepper fruit are immature or mature).

The Examiner states that the "method step of Smith is identical to that as claimed and resulted in a plant which is identical to Applicant'...". Applicant respectfully disagrees with this statement. Smith produced a pepper plant having green mature fruit by crossing a pepper plant with brown fruit with a pepper plant having orange-yellow fruit (both plants obtained from Mexico; page 138, column 1 and page 139, Table 2). The pepper plants having green mature fruit produced by the method of the present invention (Evergreen 7181 and Evergreen 6203) are not identical to those of Smith because Applicant's starting materials (plants) were not identical. Since Applicant's plants are not identical to Smith's plants, Smith's pepper fruits do not contain identical sucrose or ascorbic acid levels to those of Applicant's pepper fruits. Therefore, the

present invention is novel and not anticipated by Smith, Shifress, Osuna-Garcia and Park. Withdrawal of this rejection is respectfully requested.

The Examiner has rejected claims 12-21, 23-26, 29 and 31 under 35 U.S.C. §102(b) as being anticipated by Shifress et al. (*Euphytica*, Vol. 60, 1992, pp 123-126) in light of Park et al. (*Korean J. Plant Path.*, Vol. 5, No. 3, 1989, pp 262-270) and Osuna-Garcia et al. (*J. Ag. Food Chem.*, Vol. 46, No. 12, Dec. 1998, pp. 5093-5096).

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The Examiner states that the "method step of Shifress is identical to that as claimed and resulted in a plant which is identical to Applicant'...". Applicant respectfully disagrees with this statement. Shifress produced pepper plants having green mature fruit by crossing a pepper plant with brown fruit with a pepper plant having white fruit (both plants obtained from Smith; page 123, column and page 125, Table 2). Shifress also obtained pepper plants having green mature fruit by crossing a pepper plant with green mature fruit with a pepper plant having white fruit (page 125, Table 2). The pepper

plants having green mature fruit produced by the method of the present invention (Evergreen 7181 and Evergreen 6203) are not identical to those of Shifriss because Applicant's starting materials (plants) were not identical. Since Applicant's plants are not identical to Shifriss's plants, Shifriss's pepper fruits do not contain identical sucrose or ascorbic acid levels to those of Applicant's pepper fruits. Therefore, the present invention is novel and not anticipated by Shifress, Osuna-Garcia and Park. Withdrawal of this rejection is respectfully requested.

In view of the above amendments and remarks, it is submitted that the claims satisfy the provisions of 35 U.S.C. § 112. Reconsideration of this application and an early notice of allowance are requested.

<b>SIGNATURE OF APPLICANT, ATTORNEY OR AGENT REQUIRED</b>					
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